

**PART 4: DIGITAL ECONOMY – THE 3RD GREAT
ECONOMIC REVOLUTION**

(SKAO Hosting and Data Infrastructure)

28 SEPTEMBER

THE PIPELINE SERIES

SIDSS  21

iNFRASTRUCTURE
South Africa

OUTLINE

The Presentation covers the following

SIDSS  21

1

High Level Project Information

2

Investment Plan and Financing Gap

3

Revenue Model

4

Project Risks and Mitigation

5

Project Implementation Milestones

6

Q&A



OVERVIEW

The SKA Project

SIDSS  21

The SKAO is an inter-governmental treaty organisation responsible for delivery of the SKA project. South Africa is a founding member.

The SKA project was originally established by 12 countries, including South Africa, to design and construct the world's largest and technically advanced radio telescope - the SKA

The SKA will be hosted in Southern Africa and Australia

The MeerKAT telescope is situated in the Northern Cape and is the precursor telescope to the SKA, built by the South African Radio Astronomy Observatory (SARAO)

This is a 64 dish radio telescope and was inaugurated in 2018, and is seen as a premier scientific facility

South Africa has invested ZAR 4,3 billion into this project to date



PROJECT

(SKAO Data and Hosting Infrastructure)

SIDSS 21

Project Scope

- The 'SKA Hosting and Data Infrastructure' project is the provision of infrastructure as a consequence of South Africa's hosting of the SKA telescope.
- The scope of the project includes acquisition of: Buildings to be utilised by the SKA Observatory, subject to an appropriate long-term lease being entered into by the SKA Observatory that will result in cost recovery of initial capital and ongoing operational costs

Developmental Impact

- Critical success factor for technical and scientific operations of the SKA telescope in South Africa
- Enabling scientific return on investment by South Africa
- Net positive Foreign Direct Investment through operations
- Enabler for significant high-tech Human Capital Development, innovation and job creation

Project Sponsor(s)

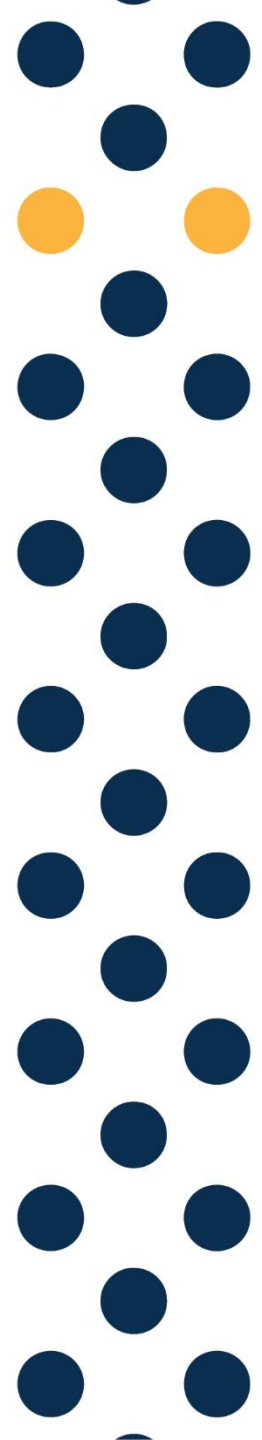
Department of Science and Innovation (DSI)

Implementing Agent

The SA Radio Astronomy Observatory (SARAO), a national Facility of the National Research Foundation (NRF)

Other Key Stakeholders

SKA Observatory (SKAO)



INVESTMENT PLAN AND FINANCING GAP

SIDSS 21

Estimated Capital Cost R1,26 bn

Funding Gap

R1,26 bn

• SKA Science Operations Centre (SOC)	R 455 m
• SKA Science Processing Centre (SPC)	R 570 m
• SKA Engineering Operations Centre (EOC)*	R 135 m
• Meerkat National Park Fence	R 60 m
• Project Preparation Funding and PM (SARAO)	R 40 m

Sources of Funding		Uses	
Debt	R'm	Project Identification	R'm
• SOC and SPC	1260	Project Management	20
• EOC*		Project Development	80
• Meerkat NP Fence		Project Implementation (Construction)	1160
TOTAL	1260	TOTAL	1260

* Bridging Funding Provided by SARAO

REVENUE MODEL

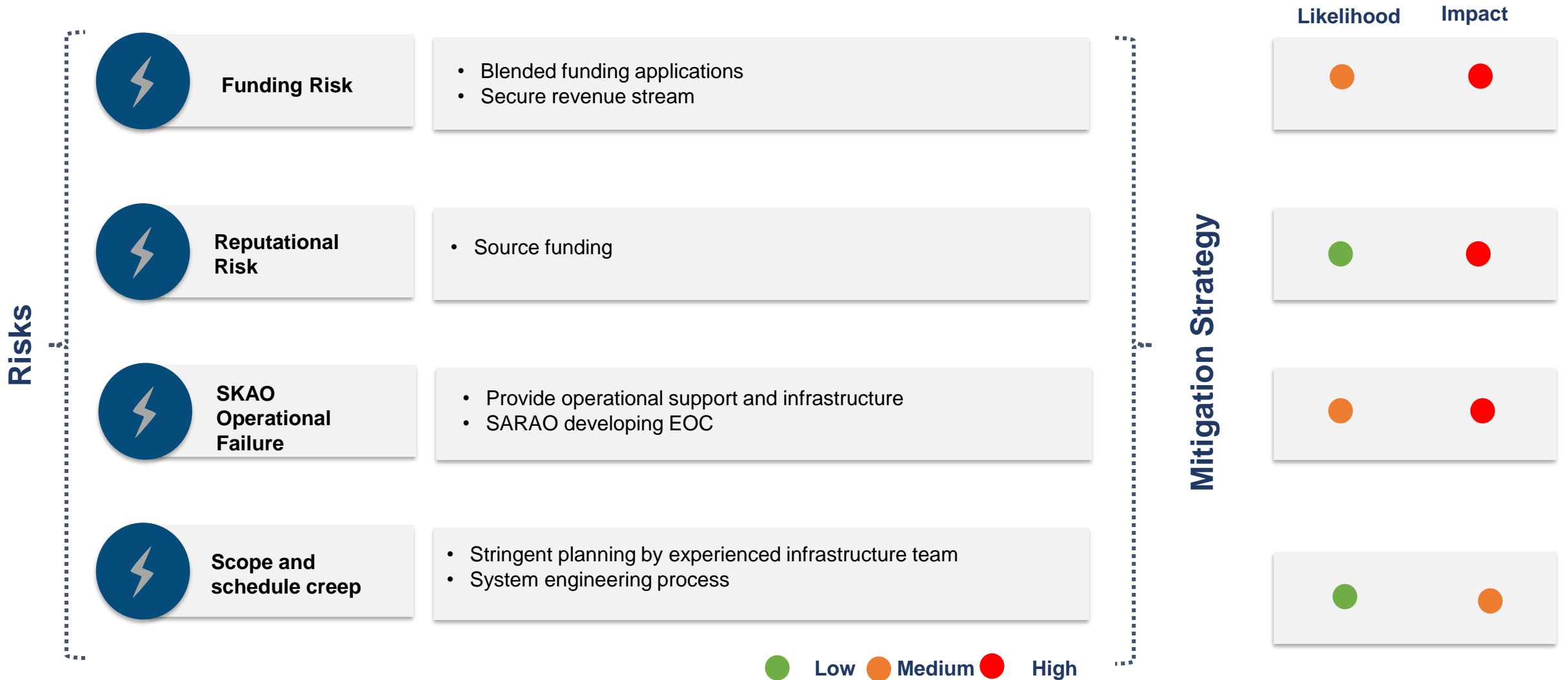


DESCRIPTION	AREA (m2)	NET INCOME COMMENCING ON 1 JAN 2025 (R/m2)	NET SALES INCOME (R)
<u>RENTAL</u>			
1 SKA OPERATIONS CENTRE, SARAO BUILDING	8839	332	R 2 934 548
2 SKA SCIENCE PROCESSING CENTRE, REGIONAL DATA CENTRE	2832	1400	R 3 964 800
3 SKA ENGINEERING OPERATIONS CENTRE	2745	285	R 782 325
TOTAL MONTHLY RENTAL	14416		R 7 681 673
TOTAL ANNUAL RENTAL	14416		R 92 180 076,00
<u>OPERATIONS COSTS</u>			
TOTAL ANNUAL OPERATIONS COSTS	14416		R 23 502 996,00
GROSS RENTAL YEARLY (EXCL VAT)			R 115 683 072,00

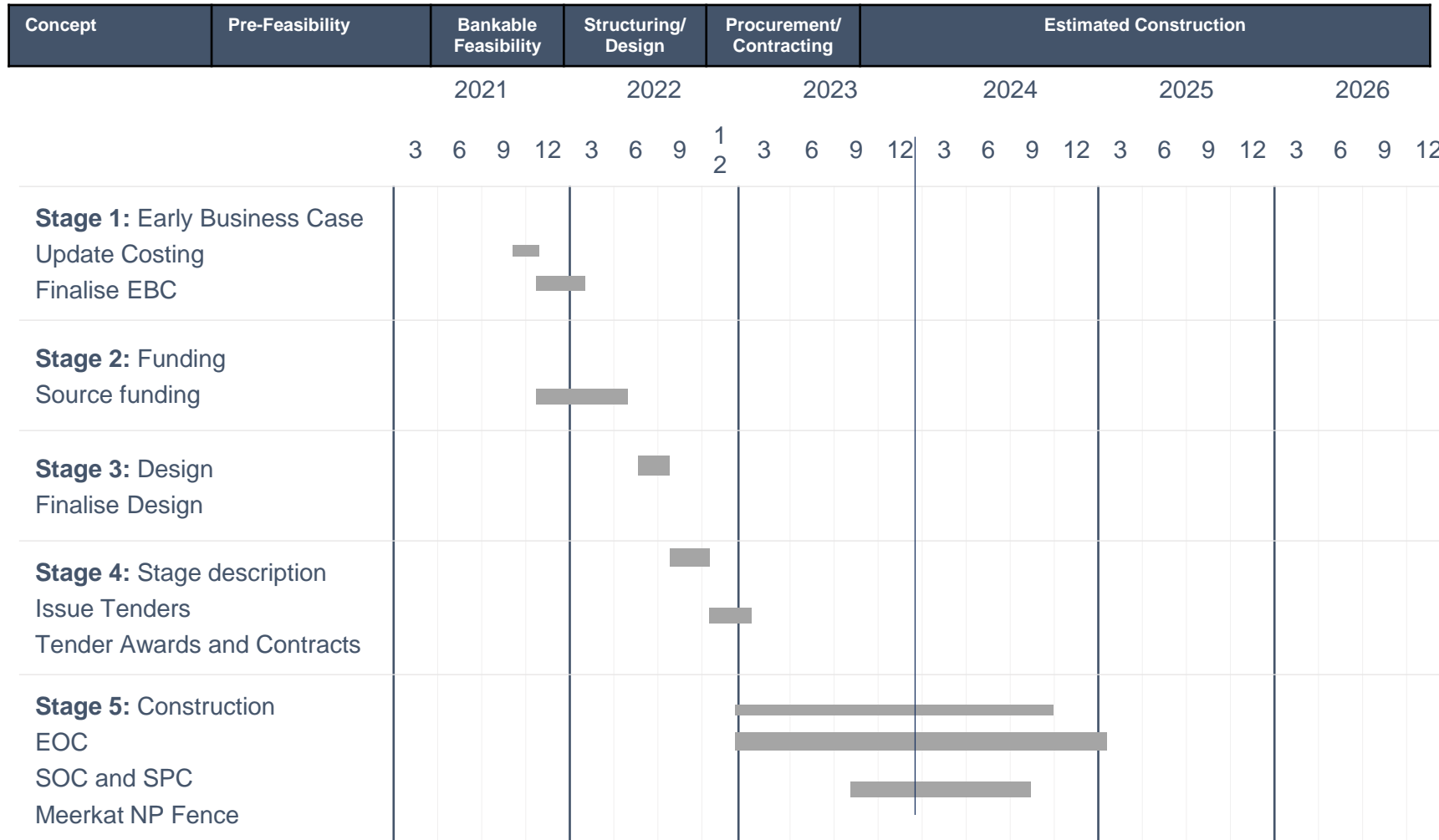
Operations costs exclude electricity, water, sewer and rates & taxes.
Operational costs include cleaning, security, maintenance, etc.

RETURNS SUMMARY	VALUE
Funding Gap	R 1,260,000,000.00
Gross Income	R 115 683 072,00
Net Income	R 92,180,076.00
Rental Yield (Based on funding GAP)	9%
CAP Rate (Based on funding GAP)	7%

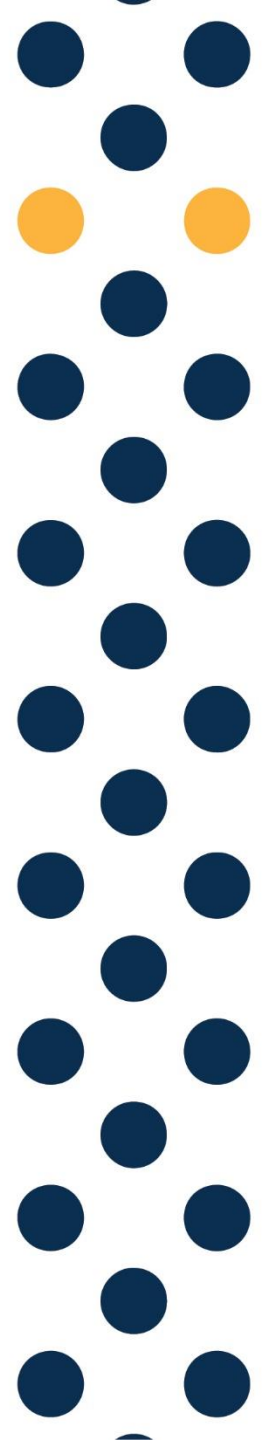
PROJECT RISKS AND MITIGATION



PROJECT IMPLEMENTATION MILESTONES



It is estimated that Financial Close will be reached in 2025



THANK YOU
Q&A

SIDSS  21